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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/798,562

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Juho Pirskanen

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EXAMINER

HOANG, THAI D

ART UNIT

PAPER NUMBER

2616

MAIL DATE

DELIVERY MODE

06/12/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/798,562	PIRSKANEN ET AL.	
	Examiner	Art Unit	
	THAI D. HOANG	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 and 20-28 is/are rejected.
- 7) ☒ Claim(s) 18 and 19 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>06/14/06; 08/08/05</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

The disclosure is objected to because of the following informalities:

Page 10, line 17, the abbreviation "MBMA" should be changed to—MBMS--.

Page 12, line 12, element 24 should be changed to-- 14--.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-13 and 23-28 are rejected under 35 U.S.C. 102(e) as being anticipated by Kim et al. (hereafter Kim), US Pub. No. 2004/0131026 A1.

Regarding claims 1-3 and 20-25, Kim discloses a method for determining a transmission scheme for an Multimedia Broadcast/Multicast Service (MBMS) service in a mobile communication system, comprising:

providing a service to at least one user equipment; and determining if said service is to be provided to the at least one user equipment by a point to point connection or a point to multipoint connection, said determining step taking into account which of said at least one user equipment to which said service is providable is able to

receive the service (a radio network controller (RNC), which provides an MBMS to at least one user equipment (UE) in the point-to-multipoint (PTM) or point-to-point (PTP) scheme based on a number of UE or total transmission power of a radio channel, p. [0027]-[0028] and [0043]-[0044].)

Regarding claim 5, Kim discloses the determining step comprises determining a number of the at least one user equipment able to receive the service and comparing said determined number with a threshold value (the mobile communication system determining a type (PTP or PTM) of the transmission scheme by a number of the at least one UE receiving the MBMS service within the cell, p. [0015], [0020], [0022], [0027], [0029], and [0052].)

Regarding claim 6, Kim discloses the determining step comprises determining whether a point to multipoint connection is used if the determined number is greater than the threshold value (if the number of UEs located in a corresponding cell is larger than or equal to the threshold, the Point to Multipoint (PTM) scheme is selected as a transmission scheme; p. [0022].)

Regarding claim 8, Kim discloses the step of suspending the service for the at least one user equipment if the respective at least one user equipment is unable to receive the service (UE1 suspends reception of a particular MBMS service from a particular cell, fig. 7, step 701, p. [0086].)

Regarding claim 9, Kim discloses the determining step comprises determining if the point to point or the point to multipoint connection is to be used (FIG. 7 illustrates a procedure for switching a transmission scheme from a PTM scheme to a PTP scheme,

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wherein UE1 suspends reception of a particular MBMS service from a particular cell, p. [0086]), when the at least one user equipment for which the service has been suspended is not taken into account (see p. [0086]-[0088].)

Regarding claims 10 and 26-28, Kim discloses the method comprising the step of:

activating a service which provides data to user equipment (figs. 2 and 6-7, step 207); and

suspending said service when said user equipment is unable to receive data of said service (UE1 suspends reception of a particular MBMS service from a particular cell while the UE1 is receiving the MBMS service, fig. 7, step 701, p. [0086].)

Regarding claim 11, Kim discloses the suspending step comprises suspending the service if said user equipment has a different connection (p. [0086], UE1 suspends reception of a particular MBMS service from a particular cell to connect with another cell).

Regarding claims 12 and 20, Kim discloses the step establishing a different connection with the user equipment and then determining if said user equipment is able to receive data of said service and to perform said suspending service if said user equipment is not able to receive data (since an UE can move between cells in the network, therefore, a new cell establishes a connection for the UE, and the old cell suspends the connection with the UE. See figs. 1 and 3.)

Regarding claim 13, Kim discloses wherein the suspending step comprises sending a suspension message from the user equipment to a network element UE sends a message to the RNC, fig. 7, p. [0086].

Regarding claims 21-22, Kim discloses the activating the service that comprises one of a multicast service and a broadcast service (p [0026]-[0028], [0043]-[0045].)

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 14-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kim as shown above in view of Koulakiotis et al. (hereafter Koulakiotis), US Pat. No. 7,031,694 B2.

Regarding claims 14-15, Kim does not disclose the suspending step comprises suspending charging for said service. However, Koulakiotis discloses a method and system for providing a service, wherein a counted time or amount of data received by the user can then be forwarded to the charging entity of the service provider 24 or network operator. Based on this information, a calculation can be made as to the amount that a user is to be charged for the duration (usage) of a particular service (col. 7, line 66 - col. 8, line 4). It would have been obvious to one of ordinary skill in the art at

the time the invention was made to apply billing method disclosed by Koulakiotis into Kim's system in order to accurately charging service to the user.

Regarding claim 16, Kim discloses wherein the suspending step comprises sending a suspension message from the user equipment to a network element UE sends a message to the RNC, fig. 7, p. [0086].

Regarding claim 17, Kim does not disclose the step of suspending charging performed by the network element, and the network element comprising a serving general packet radio service support node. However, Koulakiotis discloses the step of suspending charging performed by a serving general packet radio service support node (GGSN) connected with the service provider 24, see fig. 1, and col. 7, line 66 - col. 8, line 4. It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply billing method disclosed by Koulakiotis into Kim's system in order to accurately charging service to the user.

Allowable Subject Matter

Claims 18-19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Yi et al., US Pub. No. 2004/0116139 A1, "Radio communication scheme for providing multimedia broadcast and multicast services (MBMS)."

Hwang et al., US Pub. No. 2004/0085926 A1, "Apparatus and method for transmitting/receiving data during a handover in a mobile communication system providing MBMS service."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to THAI D. HOANG whose telephone number is (571)272-3184. The examiner can normally be reached on Monday-Friday 10:00am-6:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham can be reached on (571) 272-3179. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Thai D Hoang/
Primary Examiner, Art Unit 2616